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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/281,396	03/30/1999	DALE T. PELLETIER	10569/002001	7183

7590 10/30/2002

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EXAMINER

SING, SIMON P

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 10/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/281,396

Applicant(s)

PELLETIER, DALE T.

Examiner

Simon Sing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 22 recites the limitation "the adjoining key" in line 2. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 23 recites the limitation "the adjoining key" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.
4. Claims 22 and 23 recite the limitation "its" in line 3. There is insufficient antecedent basis for this limitation in the claim.
5. Regarding claim 20, the phrase "substantial" in line 3 renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claim (19) is rejected under 35 U.S.C. 102(b) as being anticipated by Numakura Japanese Patent No. 61-184031.

Numakura discloses a message retrieving system in figure 1 in that multifunction telephones 6-8 are connected to a switching system comprising line circuits 2 and 3, memory devices 4 and 5, and a central processing unit 1. A multifunction telephone set is shown in figure 2. The multifunction telephone comprising:

a plurality of dialing keys 15 (page 5, first paragraph); and

a message alert and retrieval device 14 [first key] with a lamp (page 5, first paragraph), whereas the message alert and retrieval device 14 is visually distinct from the its adjacent dialing keys;

When a caller initiates a call and the called party's telephone is not answered, the caller leaves a message comprising his telephone number and the time of the call to the memory 5 associated with the called party by the central processing unit 1. The

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switching sends a signal to lights the lamp (page 6, second paragraph), indicating that a message has arrived. The called party then presses the message button 14, and by inherency, sends out a message retrieval control signal to the switching system to retrieve the message, which is then displayed on a display 13 (page 6, third paragraph).

Numakura teaches attaching [integrating] a message alert lamp to a message retrieval button 14 (page 5, first paragraph).

8. Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by Welch US patent 5,938,772.

Welch discloses a computer telephony device (column 8, lines 27-35) in figures 1-3. Welch discloses a message button 280 (figure 2) with a built-in lamp (figure 3; column 5, lines 47-49, 60-64). When there is a telephone message, the built-in lamp lit up, and when the message button 280 is pressed, the telephone message is retrieved (column 12, lines 20-25).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 1, 5-8, 12-14, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numakura Japanese Patent No. 61-184031 in view of Welch US patent 5,938,772.

10.1 Regarding claim 1, Numakura discloses a message retrieving system in figure 1 in that multifunction telephones 6-8 are connected to a switching system comprising line circuits 2 and 3, memory devices 4 and 5, and a central processing unit 1. A multifunction telephone set is shown in figure 2. The multifunction telephone comprising:

- a housing;

- a plurality of dialing keys 15 (page 5, first paragraph);

- a message alert and retrieval device 14 with a lamp (page 5, first paragraph),

whereas the message alert and retrieval device 14 is visually distinct from the dialing keys; and

- a dialing interface (a telephone must have a dialing interface in order to function properly) mounted in the housing for connection elements 14 and 15 and the switching system [call management interface], which comprises a central processing unit 1, control devices 2 and 3, and memories 4 and 5 (page 4, last paragraph);

When a caller initiates a call and the called party's telephone is not answered, the caller leaves a message comprising his telephone number and the time of the call to the memory 5 associated with the called party by the central processing unit 1. The switching sends a signal to lights the lamp (page 6, second paragraph), indicating that a

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message has arrived. The called party then presses the message button 14, and by inherency, sends out a message retrieval control signal to the switching system to retrieve the message, which is then displayed on a display 13 (page 6, third paragraph).

Numakura teaches attaching a message alert lamp to a message retrieval button 14, but fails to specifically teach the detail of how the lamp and message retrieval button 14 are assembled together so that light is emitted from the message retrieval button 14.

However, Welch discloses a computer telephony device in figures 1-3. Welch discloses a message button 280 (figure 2) with a built-in lamp (preferably a LED) (figure 3; column 5, lines 47-49; column 10, lines 41-42). When there is a telephone message, the built-in lamp lit up, and when the message button 280 is pressed, the telephone message is retrieved (column 12, lines 20-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Numakura reference with the teaching of Welch so that the message alert lamp of would have been built into the message retrieval button 14, because such a modification would have clarified the teaching of Numakura and placing the message alert lamp inside the message retrieval button would have been a matter of design choice.

10.2 Regarding claim 5, the Numakura reference, modified by Welch, the switching system inherently is a private branch exchange.

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10.3 Regarding claim 6, the Numakura reference, modified by Welch, the multifunction telephone set has a push button keypad, which is capable of generating the dual tone multi-frequency (DTMF) signal.

10.4 Regarding claim 7, the Numakura reference, modified by Welch, the multifunction telephone set is connected to the switching system by a telephone line.

10.5 Regarding claim 8, the Numakura reference, modified by Welch, Numakura teaches that the message retrieval button 14 can be a pre-assigned number from the keypad (column 6, last paragraph).

10.6 Regarding claim 12, the Numakura reference, modified by Welch, the light source is located directly beneath the message key as discussed in claim 1 (figure 3 of Welch).

10.7 Regarding claim 13, the Numakura reference, modified by Welch, the light source is a light emitting diode (LED) as discussed in claim 1.

10.8 Regarding claim 14, the Numakura reference, modified by Welch, the LED is located directly beneath the message key as discussed in claim 1 (figure 3 of Welch).

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10.9 Regarding claim 18, Numakura discloses a message retrieving system in figure 1 in that multifunction telephones 6-8 are connected to a switching system comprising line circuits 2 and 3, memory devices 4 and 5, and a central processing unit 1. A multifunction telephone set is shown in figure 2. The multifunction telephone comprising:

- a housing;

- a plurality of dialing keys 15 (page 5, first paragraph);

- a message alert and retrieval device 14 with a lamp (page 5, first paragraph),

whereas the message alert and retrieval device 14 is visually distinct from the dialing keys;

- a dialing interface (a telephone must have a dialing interface in order to function properly) mounted in the housing for connection elements 14 and 15 and the switching system [call management interface], which comprises a central processing unit 1, control devices 2 and 3, and memories 4 and 5 (page 4, last paragraph);

- a transceiver (transmitter and receiver) 12 attached to the housing and electrically connected the dialing interface;

When a caller initiates a call and the called party's telephone is not answered, the caller leaves a message comprising his telephone number and the time of the call to the memory 5 associated with the called party by the central processing unit 1. The switching sends a signal to lights the lamp (page 6, second paragraph), indicating that a message has arrived. The called party then presses the message button 14, and by

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inherency, sends out a message retrieval control signal to the switching system to retrieve the message, which is then displayed on a display 13 (page 6, third paragraph).

Numakura teaches attaching a message alert lamp to a message retrieval button 14, but fails to specifically teach the detail of how the lamp and message retrieval button 14 are assembled together so that light is emitted from the message retrieval button 14.

However, Welch discloses a computer telephony device in figures 1-3. Welch discloses a message button 280 (figure 2) with a built-in lamp (preferably a LED) (figure 3; column 5, lines 47-49; column 10, lines 41-42). When there is a telephone message, the built-in lamp lit up, and when the message button 280 is pressed, the telephone message is retrieved (column 12, lines 20-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Numakura reference with the teaching of Welch so that the message alert lamp of would have been built into the message retrieval button 14, because such a modification would have clarified the teaching of Numakura and placing the message alert lamp inside the message retrieval button would have been a matter of design choice.

10.10 Regarding claim 21, modified by Welch, the message retrieval button 14 can be a round shape (figures 2 and 3 of Welch), which is visually different from the rectangle shaped dialing keys.

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11. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numakura in view of Welch and further in view of Kanzawa, US Patent No. 5,535,262.

11.1 Regarding claim 2, Numakura reference, modified by Welch, Numakura further teaches that retrieval of a message comprises dialing into the switching system (page 6, last paragraph), but fails to teach that the dialing is in response to pressing the message retrieval button 14.

However, Kanzawa discloses a private branch exchange (PBX) with recording function with extension telephones TEL1-TELn in figure 1, an extension telephone is shown in figures 2 and 3. The Kanzawa's telephone uses a microcomputer as the main control section and a function key 25, if pressed, generates a message retrieval request (column 5, lines 18-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Numakura reference, which was modified by Welch, with the teaching of Kanzawa so that the multifunction telephone set would have a microcomputer as its controller connected to the dialing interface, and the message key 14, if pressed, would have been programmed to send out a message retrieval control signal comprised of predetermined series of dialing digits as required by the switching system. Because such a modification would have enabled the Numakura's telephone set for retrieving messages from other message retrieving systems, which required an extension telephone to dial different number as configurations changed.

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11.2 Regarding claims 3 and 4, as discussed in claim 2, the Numakura's telephone set, modified by Welch and Kanzawa, comprises a microcomputer as a controller, which inherently has a memory device to store the predetermined series of dialing digits for speed dialing and initiation the message retrieval.

12. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numakura in view of Welch and further in view of Burgess, US Patent No. 6,031,465.

The Numakura reference, modified by Welch, teaches using a push-button switch to activate a message retrieval control signal, but fails to teach that the switch can be a touch sensitive, such as a membrane switch

However, Burgess discloses a keyless entry system for vehicles in that membrane switches with backlight are used (figures 1,3, 5 and column 6, lines 9-11 and lines 24-27). A membrane switch is considered as a push button switch since it had to be pushed to make contact.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Numakura reference, which was modified by Welch, with the teaching of Burgess so that the message button could be a membrane one, because since using a membrane switch or a push button switch would have been a matter of design choice.

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13. Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numakura in view of Welch and further in view of Kavanaugh et al., US Patent No. 6,223,233.

The Numakura reference, modified by Welch, teaches using a push-button switch to activate a message retrieval control signal, but fails to teach that the switch comprises a touch screen graphical icon and the light source is a liquid crystal (LCD) element.

However, Kavanaugh discloses a wallet for personal information device in figure 1, comprises a LCD touch-panel 12 (column 2, lines 1-2). Kavanaugh states in column 4, lines 37-39: "The user selects any one of the displayed icons to implement the corresponding organizer feature".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Numakura reference, which was modified by Welch, with the teaching of Kavanaugh so that the message button could be an icon on a touch-panel and the light source was a LCD element, because such a modification would have enabled a user to identify the media type of a message on a LCD display, using different icons for different messages such as fax, voice mail and e-mail.

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Numakura in view of Welch and further in view of Charlier, US Patent No. 5,153,590.

The Numakura reference, modified by Welch, teaches using a push-button switch with a built-in LED to activate a message retrieval control signal, but fails to teach using a light pipe to direct the light to the upper surface of the message key.

However, Charlier discloses a keypad apparatus reference in figure 1. Charlier teaches that lights from LEDs are directed by a light pipe element 105 to the keys' elements 103 (column 3, lines 47-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Numakura reference, which was modified by Welch, with the teaching of Chalier so that the light source assembly would have comprised a LED and a light pipe so that the light would have been directed to the upper surface of the message key, because such a modification would have enabled a user to mount a light source away from the message key in case the message key assembly did not include a light source, or did not have room to put one in.

15. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Numakura in view of Welch and further in view of Akiyama, US Patent No. 5,153,906.

The Numakura reference, modified by Welch, teaches using a push-button switch with a build-in light source to activate a message retrieval control signal, but fails to teach that the light source can be a matrix display assembly.

However, Akiyama discloses that a status lamp on a telephone set can be replaced by a matrix display to indicate the name of a recipient of a speed-dial key (figure 5; column 6. lines 34-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Numakura reference, which was modified by Welch, with the teaching of Akiyama so that the light source was a matrix display instead of a lamp, because such a modification would have enabled the light source to show more information about the message such as the name of a caller or the number of messages had received.

16. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Numakura in view of Welch and further in view of Sakayori Japanese Patent No. 5-022428.

The Numakura reference, modified by Welch, teaches a message key 14 to activate a message retrieval control signal, but fails to teach that the spacing between the message key and one of its adjoining key is differ from the spacing between two other keys.

However, Sakayori discloses that a multifunction telephone set 1 in figure 1 in that the spacing between a message retrieval key 3 and a message recording key is differ from the spacing between two line buttons 6.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Numakura reference, which was modified by Welch, with the teaching of Sakayori so that the spacing between key would have been different, because arranging keys in different spacing would have been a matter of design choice.

Response to Arguments

17. Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

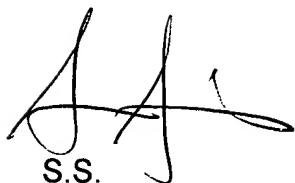
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Sing whose telephone number is (703) 305-3221. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.



S.S.

10/25/2002

FAN TSANG
SUPERVISORY PATENT EXAMINER
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